

primary health care in India
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PRIMARY HEALTH CARE IN INDIA

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A B S T R A C T

Although the concept of and the concern for health development and primary health care in India date back from the ancient period, the earlier developments got completely disrupted for various reasons. In modern time the basis for health services delivery through primary health care approach had been laid down in the recommendations of the Bhore Committee (1946). Since independence a great deal of development and expansion have occurred in the health services infrastructure in the country and various parameters of health have improved considerably. However, for attaining the goals of health for all (HFA) by the year 2000 A.D., to which the country is committed, greater and coordinated efforts have to be made in the health sector as well as in other health-related social and economic development sectors.

In this paper the basic principles of HFA development, the concept and essential components of primary health care, and the supporting activities required for its successful implementation have been elaborated. The current status in the country in regard to each of these aspects has been reviewed and the possible remedial measures for the existing problems have been suggested. There is an urgent need that the people working at different levels in the field of health and other related socio-economic development sectors should be properly oriented and motivated to develop a sense of social commitment for achieving the set goals.

HISTORICAL PERSPECTIVE

The experience and concern in health development and primary health care in India date back to the vedic period. In the Indus-Valley Civilization as far back as 3000 B.C., one finds evidence of well-developed environmental sanitation programmes such as underground drains, public baths in the cities etc. 'Arogya' or 'health' was given high priority in daily life and this concept of health included physical, mental, social and spiritual well being. This cherished value regarding health is also enshrined in an ancient sanskrit verse, 'Sarve Santu Niramayaha', which means 'Let all be free from disease/Let all be healthy', and which was often used to express good wishes.

The life style was conducive to health promotion and in the advocated daily activities of life called 'Dina Charya' the following essentials of health care were emphasised: health education, personal hygiene and habits, exercise, dietary practices, food sanitation, environmental sanitation, code of conduct and self-discipline, civic and spiritual values, treatment of minor ailments and injuries etc. In Ayurveda i.e. the 'Science of Life', one finds even in 1400 B.C. emphasis on health promotion and health education.

Unfortunately, for various reasons and particularly because of the onslaught of series of foreign aggressions and regimes leading to disruption of pre-existing health services as a part of social and cultural interactions and exchanges, the great era was lost to darkness. Ayurveda not only failed to develop, but infact, it languished because of want of adequate state patronage and recognition.

During the middle of the 18th Century, the British Government in India established medical services which were primarily meant for the benefit of the British nationals, armed forces and a few privileged civil servants. But the vast majority of the native population were denied access to the western medicine. Indigenous systems of medicine were totally neglected and allowed to languish. Services which were available at general hospitals located in big cities and commercial centres were largely curative for the care of the sick and injured. Later on, some preventive measures were provided for the control of epidemics, and dispensaries were opened in some remote villages. Provincial health departments were established in 1919. But neither health planning nor medical education was related to the health needs of the people. This strong western bias was largely responsible for blind adoption of sophisticated modern medicine for a few, neglecting the vital interests of the vast majority.

BASIS FOR PRIMARY HEALTH CARE IN INDIA IN MODERN TIME.

India gained Independence in August, 1947 after a long colonial rule. Although the National Health Policy in India was not framed and announced until 1983, the policy intent and framework, and the strategies were provided over the past three decades mainly by the following important organisations: the Constitution of India (1950), the National Development Council, the Planning Commission, several advisory bodies and consultative committees, the Ministry of Health and Family Welfare and the legislature.

Keeping in view the Constitutional obligations, the Government of India planned several approaches for the health care delivery. However, the basis for organization of health services in India through the primary health care

approach in modern time, was laid by the recommendations and guidance provided by the 'Health Survey and Development Committee' (Bhore Committee) in 1946. The Community Development Programme was launched in October 1952 as the first integrated all-round rural development programme. It was proposed to establish one primary health centre (PHC) for each community development block. At that time, the operational responsibilities of the PHC were to cover medical care, control of communicable diseases, maternal and child health (MCH), nutrition, health education, school health, environmental sanitation and the collection of vital statistics. Each PHC had three sub-centres, being looked after by a trained midwife for providing MCH services.

Subsequently, over the past three decades the health services organization and infrastructure have undergone extensive changes and expansion in stages following review by a number of expert committees, namely the Mudaliar Committee (1961), the Mukherjee Committee (1966), the Kartar Singh Committee (1974), and the Srivastava Committee (1975). Progressive changes have been introduced into the programme over the six five-year plan periods. The first five-year plan (1951-56) initiated a process of all-round balanced development to ensure a steady improvement in the living standard over a period of time. New programmes for the control of communicable diseases such as malaria, filaria, tuberculosis, leprosy etc. were instituted. Health and medical care infrastructure and facilities, and water supply and sanitation were expanded with a view to improve the accessibility and availability of services. Education and training facilities for medical and para-medical personnel and other health functionaries were also instituted and expanded.

The subsequent five-year plans aimed at extending health and family planning services to bring these increasingly within the reach of all the people for improving their health status. During the fifth plan (1974-80), removal of poverty and achievement of self-reliance on the part of the community were given emphasis. For preventing and correcting nutritional deficiencies, supplementary feeding programmes for the children and expectant mothers were initiated on a country-wide basis. The family planning programme was integrated with the MCH and nutrition programmes.

India is a signatory to the Alma Ata Declaration of 1978, and it is committed to attaining the goals of 'health for all' (HFA) by the year 2000 through the primary health care approach. Consequently, while formulating the sixth five-year plan (1980-85), a critical review was made of the approaches in the first five 5-year plans. Based on these, a long-term perspective plan was outlined by the Government for achieving the HFA goals. Also efforts were initiated for the formulation of the National Health Policy keeping in view the HFA principles and strategies. The National Health Policy was officially adopted by the Parliament in 1983. These strategies were also incorporated in the sixth five-year plan.

HEALTH FOR ALL BY 2000 AD

Concept of Health For All by 2000 AD

Since 1975, the WHO had been developing ^{the} concept of achieving health for all by 2000 AD. In the 30th World Health Assembly in 1977, it was decided that the main social goal of the governments and of the WHO should be the attainment by all the people of the world by the year 2000, of a level of health that will permit them to work

productively and to participate actively in the social life of their community. This is popularly known as "health for all (HFA) by 2000 A.D.".

In the International Conference on Primary Health Care, jointly organised by the WHO and UNICEF in Alma Ata, U.S.S.R. in 1978, this concept of HFA by 2000 A.D. was endorsed, and it was further stated that primary health care would be the key to attaining this target. The Alma Ata Declaration and subsequent WHO communications clearly stated the basic principles and strategies for HFA development, and defined the concepts and characteristics of health and primary health care. These also spelt out the minimum essential components of primary health care and the supportive activities needed for their successful implementation.

Basic Principles and Strategies of HFA Development

1. The HFA is to be attained in a spirit of social justice and as an integral part of social and economic development of the community.
2. An acceptable level of health cannot be attained through the health sector alone, but it would require the coordinated efforts of the health sector and relevant activities of other social and economic development sectors. Therefore, for achieving the ultimate social goals the strategies of the health and other developmental sectors should be mutually supportive.
3. There is a great need for a strong political will at all levels for promotion of health, and health development must be considered as a positive investment for socio-economic development.
4. There should be an equitable distribution of health

resources, and preferential allocation of resources to those in greatest social need. The health system should cover all segments of the population.

5. HFA development is to be based on self-determination and self-reliance of the individual and the community. Active community participation, encouraging the people to assume greater responsibility for their own health, would be crucial for success.

6. Social orientation of different categories of health workers to serve the people properly would be important. They should also be properly reoriented to HFA principles and strategies, and should receive adequate technical training.

7. The emphasis should be on preventive and promotive aspects of health well integrated with curative, rehabilitative and environmental measures.

8. The primary health care would be the key to the success of HFA, and it has to be an integral part of the country's health system, of which it should be a central function and the main agent for delivering health care. For attaining the desired level of health, every individual must have access to primary health care and through it to all levels of comprehensive health system. The concept of primary health care should be the driving force behind determining policies and the basis for formulating strategies and plans of action.

9. Appropriate technology needs to be developed and applied through well defined health programmes integrated into a country-wide health system.

Concepts and Dimensions of Health and Primary Health Care

Health - Health is a state of complete physical, mental and social well-being which is essential for leading a productive life, and it is not merely the absence of disease or infirmity. Provision for health should be considered a fundamental human right, and attainment of highest level of health is a most important social goal.

Primary Health Care - It has been defined as an essential health care which should be based on practical, scientifically sound and socially acceptable methods and technology. It should be made universally accessible to the individuals and the family in the community through their full participation. It is to be made available at a cost which the community and the country can afford to maintain at every stage of its development in a spirit of self-reliance and self-determination.

Primary health care is the first level of contact of the individuals, the family and the community with the national health system bringing health care as close as possible to where ^{the} people live and work. It constitutes the first element of the process of continuing health care, and this should get full support from the rest of the health system. This support would be required in the following areas: (a) consultation on health problems; (b) referral of patients to local or other specialised institutions, (c) supportive supervision and guidance; and (d) logistic support and supplies.

For achieving success in HFA development, at least eight essential components of primary health care need to be properly implemented. For this the cooperation and

support of other social and economic development sectors, such as Education, Social and Women's Welfare, Food and Agriculture, Animal Husbandary, Water Resources, Housing, Rural Development, Energy, Environmental Protection, Industry, Communication etc. would be vital.

It would be well to recognise that planning, organisation and operation of primary health care is a long-process, and total population coverage may be achieved progressively in stages, both in terms of geographical coverage and the contents.

INFORMATION ON SOME HEALTH-RELATED ISSUES AND PROBLEMS IN INDIA.

For proper appreciation of the milieu in which the health development is to occur in India, consideration of some of the relevant health-related issues and problems would be useful. These are highlighted below:

(a) India is a vast country with an estimated population of around 746 million as of March, 1985. The decinial growth rate for 1971-81 was 24.7 percent. Yearly addition to the population is to the tune of about 15 million.

(b) About 77 percent of the country's population is settled in about 576,000 villages, nearly half of which have a population of about 500 or less. Rural areas lack socio-economic development and have poor communication and transport facilities. In 207286 villages electricity supply has not reached, and about 86000 villages have yet to be covered with potable water supply.

(c) In spite of the fact that relatively larger proportion of resources have been deployed for the medical and health care in urban areas, the people living in urban slums and the urban poor have been largely neglected. They are the victims^{of} poverty and disease, and are socio-culturally maladjusted to urban life. They need specific health care programme.

(d) The country has a large dependency ratio; about 39 percent of the population are in the age group of below 15 years and only 38 percent of the population constitute the working force. Barely 14.41 percent of the working population comprise female as main workers. Being predominantly an agricultural country, about 51 percent of the employment generated is from the agricultural sector.

(e) The per capita availability of food grains is 178 kg per annum. Using caloric consumption as a criterion, it is estimated that about 37 percent of the population live below the poverty line. Certain disadvantaged groups in the society like the scheduled castes and scheduled tribes continue to suffer from social disabilities and poor economic status.

(f) Even though primary education has been made compulsory and enrolment of children has improved over the years, a large percentage of these children subsequently dropout for various socio-economic reasons. The literacy rate is still very low; only 46.7 percent of the males and 24.9 percent of the females are literate. In rural areas female literacy rate is still lower. This, coupled with highly dependent status of the women, acts as a barrier to communication and kills their initiative and enthusiasm for any social change.

(g) Environmental sanitation is poor in rural areas and urban slums; less than 10 percent of the rural population have sanitation facilities.

(h) The per capita public sector expenditure on medical and public health during 1981-82 was hardly Rs. 28/- per annum, although it has been considerably increased from Rs. 1.50 in 1955-56. Even these limited resources made available to the health sector were largely spent on urban curative services. However, during the Sixth and Seventh Five-Year Plan periods larger proportion of funds have been allotted to rural health care.

(i) As mentioned earlier, historically, the health care services in India had been developed on a Western model. Till recently these were mainly hospital-based and disease-oriented, heavily dependent on borrowed technology leading to over-sophistication and making these ill-suited to the needs of rural population.

HEALTH SYSTEM INFRASTRUCTURE

The country is divided into 22 major States and 9 smaller Union Territories, which in turn are divided into administrative districts. At present, there are 431 districts. Each district is divided into sub-districts or talukas, under which are situated the community development blocks. There are about 6,000 community development blocks in the country.

As mentioned earlier, over the past three decades the health services infrastructure and health care facilities have been expanded considerably. It is aimed to further improve the facilities as noted below (see also Table 1):

Facilities at Village Level:

In a village, for about 1,000 population, there will be one health guide and one trained dai or traditional birth attendant (TBA), both will be selected from the community. They will be trained at the level of the primary health centre (PHC) and the sub-centre. These two village level functionaries are to receive technical support and continuing education from the multi-purpose health workers (male & female) posted at the sub-centre. Other administrative control and supervision should ideally be carried out by the village health committee or the village panchayat.

Facilities at Sub-centre Level:

The most peripheral health institutional facility will be at the sub-centre, manned by one male and one female multi-purpose health workers. At present, in most places there is one sub-centre for about 10,000 population. It is however, aimed to have one subcentre per 5,000 population (3000 population in hilly and desert areas, and difficult terrain) by the end of the Seventh Five-year plan i.e. 1990. To-date about 83,000 subcentres (both on the old and new patterns mentioned above) have been established.

Facilities at PHC Level:

At present there is one PHC in each community development block, which covers about 100,000 or more population. It is aimed to establish one PHC for every 30,000 population by the year 1990. Many rural dispensaries are being upgraded to create the subsidiary health centres or these new PHCs. Each new PHC will have one medical officer, one health educator, two health assistants-

one male and one female, and the health workers and other supporting staff. To-date there are about 11,000 PHCs (both old and new combined).

Facilities at Community Health Centre:

For a successful primary health care programme, effective referral support is to be provided. For this purpose one community health centre (CHC) will be established for every 100,000 population, and this centre will provide all specialist services. The CHCs will be established either by upgrading the sub-district/taluka hospitals or some of the block level PHCs, or by creating a new centre wherever absolutely needed. For strengthening preventive and promotive aspects of health care, a new non-medical post called Community Health Officer (CHO) will be provided at each CHC.

Facilities at District Level:

District health organisation is to be appropriately strengthened to cater to the needs of the expanding rural health and family welfare programmes. Not only the planning and implementation and monitoring of health and family welfare programmes are to be carried out at the district level (preferably on a decentralised basis), all the referral services from the periphery i.e. PHCs, Community Health Centres and Taluka hospitals, are to be attended to satisfactorily.

The primary contact care will be provided by the health functionaries at the village level and by the multi-purpose workers at the sub-centres level. The cases needing further help will be dealt with at the PHC, and those needing referral support by the specialists would be referred to the community health centre. The secondary and tertiary referral support will be provided at the

district hospital and the medical college/specialised hospitals respectively.

Organisation at State Level:

Under the Ministry of Health and Family Welfare in each State, there is one executive wing headed by the Health Secretary, who has also the overall administrative control, and one technical directorate functioning under the Director(s) of Health Services.

Organisation at National Level:

Under the Union Ministry of Health and Family Welfare, there are two technical departments - the Health Department is headed by the Director General of Health Services and Family Welfare Department is headed by the Commissioner, Family Welfare. The executive wing as well as the technical departments are under the overall administrative control of the Secretary to the Government of India.

ESSENTIAL COMPONENTS OF PRIMARY HEALTH CARE

In the Alma Ata Declaration, it is stated that at least the following components should be included in Primary Health Care:

1. Education of the people about prevailing health problems and methods of preventing and controlling them.
2. Promotion of food supply and proper nutrition.
3. Adequate supply of safe water and basic sanitation.
4. Maternal and child health care and family planning.
5. Immunisation against major infectious diseases.
6. Prevention and control of locally endemic diseases.

7. Appropriate treatment of common diseases and injuries.
8. Provision of essential drugs.

CURRENT STATUS OF VARIOUS COMPONENTS OF PRIMARY HEALTH CARE IN INDIA AND REMEDIAL MEASURES.

Education of People About Health Matters -

Problems

People in general, particularly in rural areas and urban slums are not knowledgeable about health matters, such as what are the prevailing health problems in the community and how to prevent and control these; what are the needs for the maintenance and promotion of health; what are the resources available and how and when to utilize these etc. Socio-economic backwardness, ignorance, traditions and superstitions had been acting as blocks to progressive thinking including development of the concept of positive health. Health education efforts have been very inadequate. Illiteracy, particularly of the women, has acted as barriers to communication in health and related matters.

Remedial measures

Appropriate educational programmes are to be organised for different groups of people. Health education to the community should be a prime function of the health workers and village level functionaries. In this endeavour, functionaries of other sectors such as Social and Women's Welfare, Education, Agriculture and Animal Husbandary, Panchayats and voluntary agencies like Mahila Mandals and Youth Clubs can contribute very significantly. Health education in schools and adult education sessions should incorporate various health problems, and the methods for their prevention and control.

Promotion of Food Supply and Proper Nutrition - Problems

Nutritional deficiency states of varying degrees in regard to protein-calorie malnutrition, vitamin A and iodine deficiency and nutritional anaemia are prevalent in a wide section of population. Nutritional deficiency states are particularly noticeable among pregnant and nursing mothers, and in infants and children. Available statistics indicate that of the deaths occurring among the age group of 0 to 5 years, in 7% of deaths malnutrition is the causative factor and in another 46% it is an associated factor.

Remedial measures

This dismal condition can be substantially improved by organising and conducting nutrition education in the community and in the schools; encouraging people to make kitchen gardens and community gardens; and educating the people on food hygiene. Steps also need to be taken to encourage growing locally more foods such as cereals, pulses, vegetables, fruits, milk, fish and poultry products through cooperative and other efforts so as to make these easily accessible and affordable to the people. Simultaneously, the purchasing capacity of the families might be improved through a variety of income generating schemes. In addition, for the moderately and severely malnourished groups, special nutrition programmes are to be organised.

In these endeavours functionaries from other sectors such as Agriculture, Animal Husbandary, Irrigation, Banks and Cooperatives, Social and Women's Welfare, Panchayat and Voluntary Organisations can play a very significant role.

Supply of Safe Water and Basic Sanitation Measures

Problems

Many health problems have their roots in various aspects of community life and can not be influenced by medical or health interventions alone. Safe and potable water is not available to a majority section of the population. Many of the water borne diseases prevalent in the country are preventable, but the importance of the use of pure and safe water as well as the personal hygiene are not properly appreciated. Environmental sanitation is very poor, particularly in rural areas and in urban slums. In most of the places, there are no proper arrangements for disposal of human and animal wastes, sewage and sullage etc.

Remedial measures

Systematic approach should be made to survey and identify resources of safe water and to carry out proper analysis of the water. Arrangements should be made for regular purification of water through chlorination etc. before using for drinking and other household purposes. People at all levels including the village leaders, women, and children at schools should be educated on continuous basis about the importance of proper maintenance of water resources, simple means of purification of water and the use of safe water. Observation of personal hygienic practices should be emphasised.

It would be important to organise the people and the resources for constructing house-hold and community latrines, and making arrangements for collection and disposal of human and animal wastes. Proper and imaginative disposal of waste water is also very important. Construction of composting facilities, soakage pits and use of some of the waste water in kitchen gardens should be encouraged and helped. Educating the women about the proper maintenance of

water sources and the importance of kitchen garden would be helpful. Proper educational programmes on all these aspects for the children, youths and adults and the mothers should be organised in a systematic manner.

In these programmes cooperation of the workers of other sectors such as Irrigation, Engineering Department, Village industries, Agriculture, Education, Social and Women's Welfare, Rural Development, Panchayats and co-operatives would most vital.

Maternal and Child Care

Maternal care -

Problems

Compared to developed countries as well as some developing countries the current maternal mortality rate of 4 to 5 per 1000 live births in India is quite high. No valid information on morbidity data on mothers is available. Maternal care - antenatal, natal and post-natal, in rural areas and urban slums, is totally inadequate. In rural areas, majority (about 80%) of births are occurring outside the institutions, and are being attended by untrained birth attendants.

Some of the important causes of maternal mortality are sepsis, haemorrhage, toxemia, illegal abortion and malnutrition. Liberalization of abortion laws and enactment of Medical Termination of Pregnancy (MTP) Act in 1971 were the direct outcome of the realisation of the fact that induced abortion performed by unqualified persons under unhygienic conditions significantly increased maternal mortality and morbidity. Facilities for MTP services by properly trained and skilled doctors are to be provided, wherever needed, in rural areas and urban slums.

Remedial measures

Systematic efforts are to be made to progressively increase antenatal registration and care of pregnant women from the present level of 35 to 50 percent to 100 percent. It is also to be ensured that progressively almost all deliveries are conducted under aseptic conditions by trained health personnel i.e. the dais or female multi-purpose workers. Pregnant and nursing mothers should get prophylactically two to three doses of tetanus toxoid, and iron and folic acid supplement for nutritional anaemia. During post-natal check-ups, mothers are to be educated on breast feeding, growth monitoring, proper weaning practice and immunisation of the child; and on personal hygiene, exercises, proper diet and family planning.

Infant care -

Problems -

The infant mortality rate (IMR) of 105 per 1000 live births (as per estimates of SRS in 1982) in India is very high and this figure will be much higher for rural areas. About 50 to 60 percent of this is caused by mortality during the neonatal period (0-28 days) and particularly in the first week of life. Several factors contribute to this mortality and these include poor maternal health during pregnancy, frequent child births, inadequate care of mothers at risk, poor infrastructure facilities, lack of care of newborn at birth and practically no facilities for newborn care from primary to tertiary levels.

Low-birth-weight infants, either due to prematurity or due to intra-uterine growth retardation, result from various factors such as low maternal weight and height, frequent pregnancies, maternal malnutrition and anaemia, chronic maternal diseases and pregnancy complications.

Low birth weight is particularly associated with prematurity is a major underlying factor for neonatal or infant mortality. Non-immunisation of pregnant women with tetanus toxoid may result in death due to tetanus neonatorum.

Remedial measures

For dealing with these problems, the dais and female health workers and health assistants have to be properly trained in perinatal and neonatal care adopting a high-risk approach. Proper facilities for referrals to the secondary and tertiary levels are also to be developed and organised. Communities are to be properly educated about the importance of antenatal and neonatal care, and be encouraged to actively participate in these programmes.

Care of young children -

Problems

Among the children aged 0-5 years i.e. the pre-school children, the major problems are the morbidity and mortality due to malnutrition, diarrhoeal diseases, respiratory infections and other preventable infections. Malnutrition predisposes the children to infection, the morbidity rates being three times higher in malnourished children.

Remedial measures

Two types of intervention programmes would be needed: a) prevention and treatment of malnutrition, and b) reduction of mortality due to diarrhoea, respiratory infections and other infections preventable by immunisation.

The strategies for reduction of prevalence rate of malnutrition in pre-school children would be: a) to

provide nutrition education to the mothers; b) to detect the cases of malnutrition and to grade them; c) to rehabilitate grades I and II cases by supplementary feeding from home resources; d) supplementary feeding of grade III cases at Sub-centres; and e) referral of grade III cases associated with diarrhoea or infection to secondary level of care i.e. the Community Health Centres or District or Taluka level hospitals.

The strategies for reduction in infant mortality due to diarrhoeal diseases and respiratory infections would be: a) to educate the mothers how to prevent and treat diarrhoeal and respiratory diseases; b) to train the health functionaries about how to recognise and treat these disorders, and to judge which patients would need referral to higher levels of health services; c) to create facilities for secondary level care of referred cases, and d) to provide drugs, oral rehydration salts (ORS) and other supportive measures.

All children, preferably at the age of under one year must be immunized against tuberculosis, poliomyelitis, diphtheria, tetanus, whooping cough, and measles (where feasible).

Family planning

Problems

Even though India was the first country in the world to take up family planning as an official programme in 1952, achievements over the past 33 years have not been as good as would be desirable. Currently, the crude birth rate is around 33 per 1000 population. For reducing the birth rate to 25 per 1000 population and to achieve a net reproduction rate (NRR) of unity by 2000 A.D., 60 percent

of the eligible couples in the reproductive age are to be effectively protected through contraceptive practice. It is estimated that about 32 per cent of the couple in the reproductive age group have been protected by contraceptive measures. Out of this nearly 27 per cent have been protected by sterilisation alone, and only 5 percent have been using spacing methods. More than 80 percent of the acceptors of sterilisation had three or more living children. Obviously, we may not expect the desired demographic gain from such contraceptive measures.

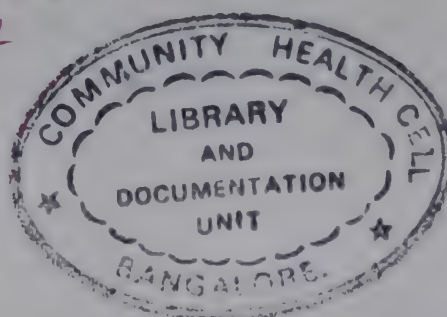
Remedial measures

Now more concentrated attention has to be given to younger couples with low parity - i.e. the newly married couples, and one-child and two-child families for contraceptive protection with spacing methods.

The acceptance and continued use of contraceptives are influenced by several factors such as the character of the method including its advantages and disadvantages; individual and social acceptability; provider's knowledge skill and attitude; effective communication, motivation, and counselling; the nature and quality of delivery services including supply logistics and follow up care; and the cost.

Small family norm has to become a way of life; for this purpose, organisation of population education in the schools and colleges, for the out of school youths and in adult education programmes would be most vital.

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For creating favourable atmosphere conducive to adoption of small family norm, and acceptance and practice of effective contraception, the following means may be adopted:

(a) for educating the community, the family and the individual couples, systematic and coordinated use of mass media, group orientation and inter-personal communication would be important. The goal of the family welfare workers would be to: (i) supply necessary information for education and motivation, (ii) assist the client to evaluate contraceptive information and services, and to make an informed choice and decisions about these, and (iii) encourage them for continued contraceptive use;

(b) the health personnel should be properly trained with a view to strengthen their knowledge and skill in properly educating and motivating the prospective users, and to develop ^{in themselves} a proper attitude and faith in the programme;

(c) the service agency should be properly geared for effective implementation, monitoring and evaluation of contraceptive services; and the logistics for procurement and supply should ensure continued regular supply of contraceptive ;

(d) effective delivery of contraceptive services at the door-steps of the people is considered to be an important measure for promotion of small family norm;

(e) for promoting acceptance of family planning the infant mortality rate has to be brought down speedily and the chances of child survival have to be substantially improved;

(f) enforcement of universal primary education and prevention of drop-outs would be an important step towards acceptance of small family norm; special attention needs to be given to the girls and women;

(g) studies have shown that optimum age of the mothers for reproductive outcome is between twenties. Therefore, enforcement of the law on the minimum age of marriage as well as counselling the women not to bear any child before the age of 20 would be an important strategy; and

(h) since women have been found to be important instruments for social change, raising the social status of women and involving them in various welfare activities including family planning would be important.

Immunisation Against Major Infections Diseases -

Immunisation of the children and pregnant mothers has already been referred to earlier. In some endemic areas immunisation against cholera and typhoid has also to be considered. For the organisation of appropriate educational activities as well as for providing services and follow up support and care, the help and cooperation of other sectors such as Education, Social and Women's Welfare, Panchayat and Voluntary Organisations would be very valuable.

Prevention and Control of Locally Endemic Diseases -

Although the prevalence of endemic diseases will vary from one region to another, some of the important ones are: tuberculosis, malaria, leprosy, filaria scabies, guinea-worm infestation, rabies, iodine deficiency goitre etc. People are to be educated for their early diagnosis and treatment health functionaries are to be trained for early detection and the services and follow up care are to be organised.

The Government has launched various national programmes for the control or eradication of these endemic disorders. A few of these are elaborated below:-

(1) Leprosy eradication programme - Leprosy is a major

public health as well as social problem in India. It is estimated that in India there are about 4 million cases of leprosy, out of estimated 12 million cases spread over 70 countries of the world. This disease continues to be associated with high degree of ignorance, prejudice and social stigma leading to ostracization of the victims within the community. Leprosy is prevalent in all the States and Union Territories in the country, with the States of Andhra Pradesh, Tamil Nadu, Orissa, Maharashtra and West Bengal having high endemicity contributing about 60 per cent of the total case load.

The Government of India have accorded due priority to the problem of leprosy and it has been included in the new 20-point programme of the Prime Minister. The strategy for eradication programme includes: (a) early detection and regular treatment of cases at home; (b) patient care in hospitals and rehabilitation of deformed patients wherever necessary; (c) health education of patients and their families and the community; (d) early detection, prompt, regular and complete treatment, and acceptance of leprosy like any other communicable diseases; (e) removal of ignorance, social stigma and superstitions, and (f) training of personnel working in the programme.

(2) Tuberculosis control programme - Tuberculosis is a major public health problem in India. Except for a national sample survey conducted by the ICMR during 1955-58, no other survey has been undertaken till today. However, it is estimated that at present nearly 10 million persons are suffering from active tuberculosis of the lungs, of which about 2.5 million are sputum positive. It is further estimated that 40 per cent of the total population is infected with T.B. bacilli, though they may be apparently healthy. Earlier it was estimated that mortality rates for T.B. infection was about 80 per 100,000 population. As per

results of a recent study it seems that the mortality rates have come down to about 53 per 100,000 population.

National T.B. Control Programme has been in operation since 1962 and it has established T.B. Centres in every district to organise T.B. programme in association with all existing medical and health institutions. The main aim of the programme has been: (a) to detect as large number of patients suffering from T.B. as possible, (b) to treat them effectively to reduce suffering, disability and death from this infection, and (c) the District T.B. Centres to serve as nodal centres for case finding and treatment activity.

(3) Programme for control of blindness - According to a survey undertaken by ICMR (1971-73), India has about 9 million blinds and another 45 million people who suffer from visual impairment. Roughly 8 out of 100 persons need some form of eye care. National Programme for Control of Blindness was launched throughout the country by the Govt. of India in 1976 with the object of reducing the prevalence of blindness from 1.4 to 0.5 per cent by the year 2000 A.D. The aim of the programme is to provide immediate relief to the needy by camp approach and establishing permanent eye care facilities with graded expertise of different levels, coupled with health education measures. Each PHC and district hospital are to be provided with one Ophthalmic Assistant each. About 37 Training Schools have been established throughout the country for training the Ophthalmic Assistants.

(4) Malaria eradication programme - Modified plan of operation for National Malaria Eradication Programme was launched in 1977 with the object to reduce the morbidity and mortality due to malaria and to maintain the achievements gained during the eradication era. For achieving these objectives the following activities are organised: (a) insecticidal spray in areas recording two cases per 1000

population per year; (b) fortnightly surveillance of fever cases - ^{including} examination of blood smears, administration of presumptive treatment to fever cases and radical treatment to positive cases; (c) public cooperation for opening fever treatment and drug distribution centres; and (d) research for strengthening malaria eradication programme.

For success in these activities, cooperation of different sectors such as Education, Social and Women's Welfare, Animal Husbandary, Panchayat and Voluntary Organisations, Industry and business houses should be ensured.

Appropriate Treatment of Common Diseases and Injuries -

Treatment of minor ailments and first-aids may be given at village level. Treatment of common diseases and injuries are to be provided at the sub-centres and PHCs, and appropriate referral services are to be organised. People need to be educated about the availability of local remedies and other facilities to meet these needs. Other sectors such as Education, Social and Women's Welfare, Panchayat, Voluntary Organisations can play an important role in educating the people and school teachers etc. and in organising of resources.

Provision of Essential Drugs -

For local health care and treatment of common diseases and disorders, at least 20 drugs should be available within one hour's walk and travel. Utilising locally available remedies and using indigenous system of medicines should be considered. Considering the financial constraints from Government sources, community's participation through co-operative funding etc. may be explored.

SUPPORTIVE ACTIVITIES REQUIRED FOR PRIMARY HEALTH CARE

The W.H.O. have identified a number of supportive activities essential for successful implementation of primary health care which are enumerated below:

1. Community involvement and participation.
2. Intra- and inter-sectoral co-ordination.
3. Development of effective referral support.
4. Development and mobilization of resources
5. Involvement of managerial processes.
6. Health manpower development
7. Medical and Health Services Research including innovative approaches.
8. Development and application of appropriate technology.

Community Involvement and Participation

For the success of primary health care, community involvement and participation will be most vital. So far meaningful community participation in various programmes has been largely lacking, except in certain parts of the country where village panchayats and voluntary agencies have taken some interest.

Ideally, true participation means that the people should be knowledgeable about their health problems; they should identify the needs, draw out plan of action according to the priority, and the resources available, organise and implement programmes, monitor and control the progress, and periodically evaluate and do the reprogramming. Initially, there may be passive involvement which has to be gradually and progressively made more active participation. Some of the recent developments would be conducive to increasingly greater participation of the community in the

care health/programme. The Health Guides and the trained Dais are local people. With the activation of the village health committees, mahila mandals, youth clubs etc., it should be possible to get greater active participation of the community. The community should be able to mobilise resources and gradually try to become self-reliant in matters of health and family welfare in a spirit of self-development. Health and family welfare personnel working within the community have to develop credibility among the people and act as catalytic agents. Although in the primary health care approach emphasis has to be given to preventive and promotive aspects of health care, curative services which are the felt-need of the community are to be provided satisfactorily and this will serve as an entry point for establishing credibility of health personnel

Some of the advantages of community participation which may be emphasized are as follows:

(a) Experiences have clearly demonstrated that community participation can significantly contribute to bringing about general developments and to health development in particular.

(b) It increases the understanding the users - perspective in the management of health. It also renders the services more accessible and acceptable to the people.

(c) It promotes and strengthens self-reliance in matters of delivery of health services. Participation also develops a sense of responsibility for the health care programme.

(d) It can also bring down the cost of the health care, as the indigenous knowledge and local resources are utilised by the community.

(e) For the preventive and promotive aspects of primary health care, the people in the community have to play ^{the} main role.

(f) It is important to recognise that the integration and coordination of different sectoral activities necessary for making adequate and sustained impact on health, can be brought about only at the community level and through community actions and organization..

Intra-Sectoral Coordination

Within the health sector, besides the national health system, a number of non-governmental agencies are functioning and catering to the health needs of a large proportion of the population. These agencies include voluntary organizations, non-governmental organizations, professional bodies, private practitioners of modern medicine and indigenous system of medicine, many university departments and specialised institutions. ^(Table 2) Studies have shown that in some rural areas as much as 60-70 per cent of the health care is being provided by such non-governmental agencies. Unfortunately, no systematic efforts have been made for establishing proper linkages and coordination with these non-governmental agencies. There is an urgent need to evolve processes for effectively linking their efforts and activities in the national health care delivery system for ensuring coverage of all sections of the population through primary health care.

Even within the existing health system itself, there is a great scope for integrated and coordinated efforts. In many situations it is observed that separate vertical programmes are in operation without establishing any linkage among themselves. In some places, even the health and family welfare programmes are being run independently without any integration.

Inter-Sectoral Coordination

Health and Family Welfare programme cannot stand on its own in an isolated manner. The activities of other developmental sectors directly as well as indirectly influence health development. Therefore, primary health care has to become a part of the overall socio-economic development process, and it demands coordinated efforts of all sectors such as Agriculture, Irrigation, Animal Husbandary, Education, Social and Women's Welfare, Housing and Public Works, Communication, Rural Development, Cooperatives, Industries, Panchayats and Voluntary Organizations, etc. (Table 2). At present, extension workers and functionaries of these sectors/departments are operating in the field without any linkages or coordination among themselves. While some mechanisms for coordination at the Central, States and District levels are to be developed, functional linkages and coordination in the activities of the workers/functionaries of all these sectors at the grass root level should be possible. Arrangements should be made for their working in the periphery as a team, each member knowing who is doing what and for what purpose, so that programmes could be implemented in a more complimentary manner avoiding unnecessary duplication of efforts. Some suggested outlines of the activities of different sectors are given below:

Agriculture, Irrigation and Engineering - These workers can help in the following:

- (a) growing more food locally - cereals, pulses, oil seeds, vegetables, fruits etc;
- (b) identifying water resources for drinking and other purposes;
- (c) providing seeds for kitchen garden and community garden;

(d) educating^{the} people for composting;

(e) their extension workers could also educate people on health problems and about health and family planning practices.

Animal Husbandry - The workers of this department could help in:

(a) developing poultry farms, procuring milking cows/buffalos etc.;

(b) immunising domestic animals and cattles against rabies etc.;

(c) preventing zoonotic diseases;

(d) promoting health education.

Cooperatives and Banks - These can provide funds for:

(a) making farms for poultry, fisheries, milk, vegetables, fruits etc.;

(b) community composting, soak pits, community gardens etc.;

(c) drug procurement and supply;

(d) health insurance.

Education - Workers of this department can help through school and college education and adult education programmes in the following:

(a) health education covering nutrition, use of safe water, personal hygiene and environmental sanitation;

(b) education about various health problems in the community and their prevention and control;

(c) early diagnosis of tuberculosis, leprosy, malaria, scabies, visual and physical handicaps etc.;

(d) immunization against communicable diseases and the advantages thereof;

(e) disposal of waste water and excreta, by making soakage pits and composting etc.;

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- (f) population education, advantages of small family etc.;
- (g) providing first-aid and treatment of minor ailments and the knowledge of local health resources.

Social and Women's Welfare - The workers of this department can help in:

(a) mobilising women, mahila mandals, mother's club etc. for propagation of health, nutrition practices, special nutrition programmes for vulnerable groups, maintenance and use of water resources; proper disposal of excreta, composting, kitchen garden etc.

(b) education of mothers on maternal and child care; and

(c) spreading the knowledge about the communicable diseases and their prevention and control, treatment of minor ailments and the use of available health care facilities.

Panchayats - These can play a very important role in providing funds and giving organizational, administrative and other support for:

(a) nutrition programme, kitchen and community gardens, water supply, community latrines, waste disposal, composting, soakage pits etc.;

(b) providing building for health posts, creches, sub-centres etc. for MCH & FP activities;

(c) opinion building, motivation, decision-making through peer pressure;

(d) propogating messages on health problems and practices, family planning etc. through group meetings, circulars, posters etc.;

(e) procurement and supply of essential drugs; and

(f) mobilising transport and other support for referral services.

Communication - This department has a very important role in organising information, communication and education activities for motivating people for adopting positive health practices and small family norms.

Rural Development - This department can play a role in various ways such as:

- (a) environmental sanitation;
- (b) development of rural communication;
- (c) developing income generating schemes for poverty elimination; and
- (d) others.

Development of Referral services

For the success of primary health care one of the essential requisites will be development of proper referral support at secondary and tertiary levels. This has to be built in a systematic manner. Adequate two-way referral support is to be provided. For this a system needs to be devised linking various relevant institutions, starting from individuals and simplest of health institutions in small communities and continuing through increasingly complex institutions along the health system chain. Particular attention has to be given to those institutions which provide direct support to primary health care. For organising a proper and effective referral system, it would be useful to review the functions, staffing, plan, design available equipment etc. and the organisation and management of health centres and district hospitals, in order to prepare these for their wider function in support of primary health care.

Presently, there are various problems which need to be sorted out:

- (a) people and the community are often not satisfied with

the services being provided at the primary and secondary contact levels;

(b) they are bypassing the local facilities causing overcrowding at referral centres/urban centres, as a result of which the quality of care at referral hospitals is suffering;

(c) there is lack of physical facilities, back-up support and supervision; lack of mobility of health personnel; lack of communication and transport for emergency cases; lack of effective logistic and supply system; lack of flexibility etc.;

(d) low priority is given to the referred cases by the consultants of the urban/referral centres; and

(e) lack of proper resources in terms of health manpower, finances and equipment.

For developing an effective system for referral care, the following issues need careful attention:

- (a) establishing network of institutions
- (b) ~~developing appropriate record system~~
- (c) identification of referred cases
- (d) transportation of patients
- (e) building teams and movement of specialists
- (f) providing support for services
- (g) involvement of private practitioners and voluntary agencies.

Development and Mobilisation of Resources

For obtaining relatively larger investments in health development programmes from the public resources, strong political commitments are necessary. It is often noted that due to lack of knowledge and persistent efforts, available funds for many development projects remain un-utilized. Furthermore from the community itself substantial financial and human resources can be mobilized; some of these, such as the

enthusiasm and the energy of the youth and the women for community action, may otherwise remain unused.

Communities with institutional structures, such as a local body or council, a cooperative etc., can mobilize resources for community purpose more easily than those relying on individual and voluntary contributions. In some voluntary projects, small regular contributions by rural families have served as a kind of 'group insurance schemes' and have substantially covered the cost of primary health care in the community. Such an approach may bring out a radical improvement in the quality and coverage of health care among the rural people.

Involvement of Managerial Processes

Management is a process for purposeful and effective utilisation of resources- manpower, material and money, for fulfilment of a pre-determined objective. The managerial processes involve the following steps:

(a) Situational analysis; (b) Policy formulation; (c) Setting goals/objectives/targets; (d) Framing of strategy; (e) Making Plan of Action; (f) Broad programming; (g) Budgeting (h) Detailed programming; (i) Implementation-organization of resources, and initiation and directing of activities; (j) Monitoring and control; (k) Evaluation and feed-back; and (l) Reprogramming. Proper information support is needed for all these steps.

In the organisation and development of national health care delivery system, the application of different components of the abovementioned managerial processes will vary with different categories of personnel working at different levels. Functioning at different levels would also require blending of varying degrees managerial and technical skills. The

higher the level in the organisation the greater is the need for managerial function and lesser the need for technical skill. Conversely, the lower the level in the organization, the lesser is the need for managerial function and higher the need for application of technical skill. However, even at the grassroot level development of well coordinated and systematic style of functioning by various categories of personnel would be very important for proper management of the programme. Furthermore, in participatory management the principles and different components of managerial processes should be well understood by all concerned.

It is being increasingly realised that management training alone for the health personnel may not be sufficient for achieving the objectives. What is needed is management development. According to this concept besides improving the managerial capabilities of the manager, management practices and culture of the organization or the system are also to be changed and improved.

Health Manpower Development

Vigorous action is to be taken to ensure availability of adequate numbers of appropriate health personnel required to devise and implement the plans of action. This would require reorientation of the existing health workers, development of new categories of workers in health and related sectors, and motivation and training of all manpower to serve the community. For social orientation of all categories of health workers to serve the people as well as to improve their technical skill, the cooperation of the Ministry of Education and of all educational and training institutions has to be ensured. This may need reform of educational curriculum and programme.

While dealing with manpower, the useful role of the

traditional medical practitioners, the birth attendants, and even the family members needs to be considered. The last category assumes importance particularly from the point of self-care as a part of primary health care i.e. taking of responsibility by the individuals and families for their own health care.

considerations
Obviously, keeping in view the above three main types of approaches are to be made:

- (a) pre-service and inservice training of the newly recruited and existing health and family welfare personnel as a part of continuing education;
- (b) appropriate basic professional training of medical, nursing and other paramedical personnel in future; keeping in view the contemporary needs reform of educational curriculum may be warranted.
- (c) development of new categories of workers, as exemplified by the health guides, community health workers etc.

Continuing education provides means of equipping workers to perform competently in their current and future jobs with the object of increasing the efficiency of the individual as well as the organisation. It is the planned provision for systematic learning in the job, and is an essential element for personal and organisational development. An important factor for achieving Health for all by 2000 A.D. would be the ability of the individual and the organisation to recognise and respond to changes in advancing technology for health maintenance and promotion, new pattern of diseases, disabilities etc., new social policies, expectations and programmes for better health services.

New competencies are to be developed at different levels to be able to observe, analyse, interpret realistically and react intelligently to human behaviour, events and

and environments, be able to effectively perform as a member of the team, and to address to the priority community problems and concerns; and to develop proper attitude for continuous learning. The concept of life-long education is being increasingly accepted as an indispensable supplement to basic education. Although in the country there exist some programmes of continuing education, these are piecemeal, largely ineffective and sometimes inappropriate.

For maintaining high level of competence and performance and to strengthen national will to achieve Health for All by 2000 A.D. through primary health care, development of adequate systems for continuing education and to integrate it with 'supervision' at all levels would be most vital for proper Health Man Power Development. Such education or systems should be based on identified real community problems and needs; the task to be performed; the methods, techniques and equipment to used; and continuing education should be provided to all health workers and their supervisors. The responsibility of providing competency-based continuing education should be shared by the individuals, the health care system, the educational institutions/system and the professional bodies.

Medical and Health Services Research

A network of comprehensive health care system based on primary health care approach and integrating preventive, promotive, curative and rehabilitative aspects is to be developed covering all sections of the population. Although there are some micro level experiences of successful implementation of ^{all the components and principles of} primary health care approach, these have not been developed systematically within the health system and not been extended to larger areas of districts or state level.

There is a need for evolving, through appropriate operations research programmes, replicable and viable models that could be adapted in the health system in an incremental fashion.

The health services infrastructure has been and is being expanded and manpower is being deployed on arbitrary basis. There is an urgent need for undertaking systematic works study at different levels such as sub-centre, primary health centre, community health centre etc. for evolving a more rational basis for determining job functions, staffing patterns etc.

Many of the existing programmes under the health services are not progressing properly. There is a need for systematic evaluation of these programmes with the object of improving the existing model or developing suitable alternatives, wherever needed. In fact, health services research should play an important role in the process of planning, implementation, monitoring and control, and evaluation and feedback, with the object of strengthening primary health care.

Development and Application of Appropriate Technology for Health

While formulating the strategies and programmes and designing the services, it would be helpful to review the existing technologies and identifying those that are appropriate; and to indicate and promote the type of research required to develop alternatives to replace inappropriate technologies. In this endeavour, it would be useful to promote participation of the government departments, research and academic institutions, the industry and the non-governmental organisations both in health and health related sectors.

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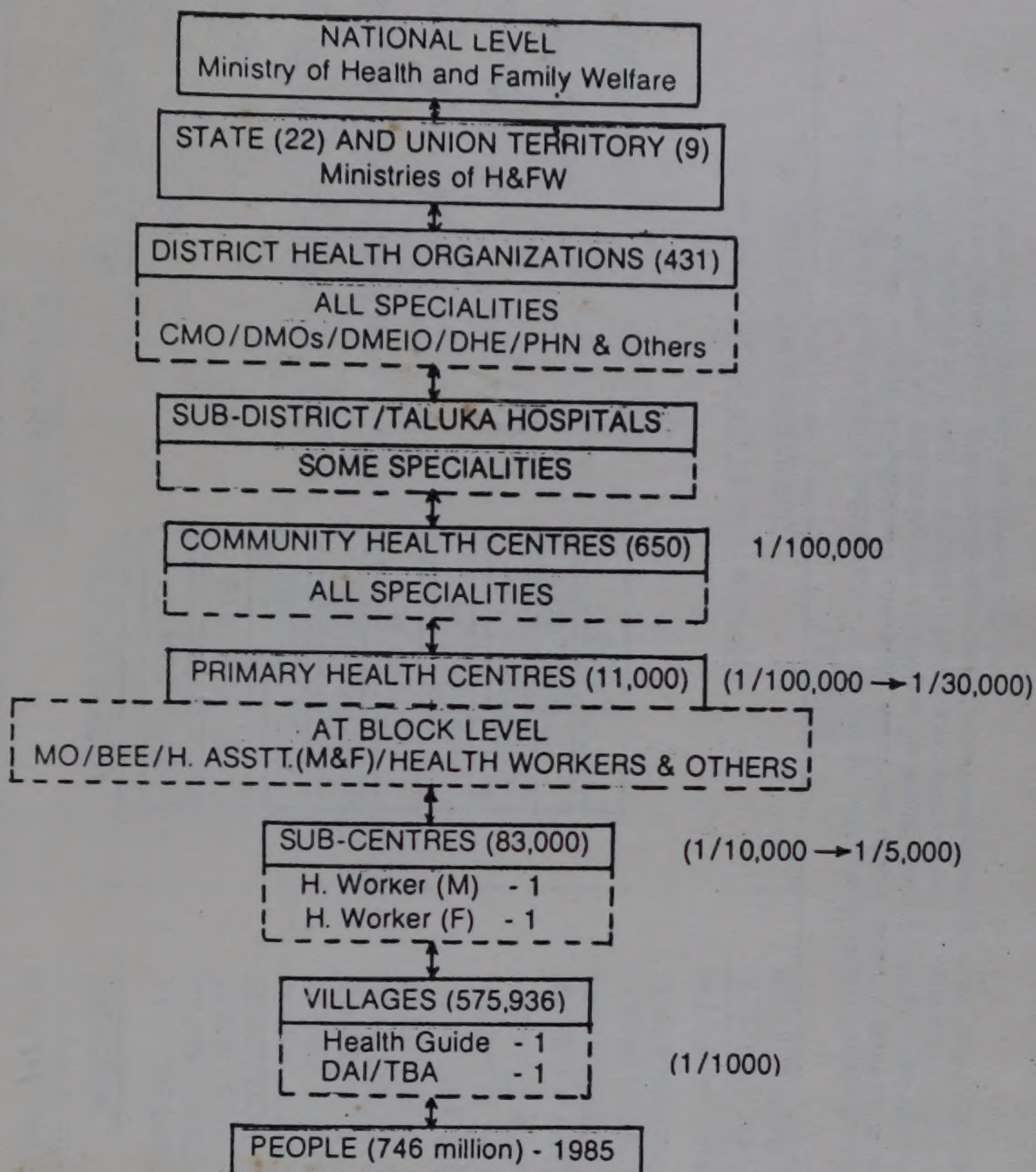
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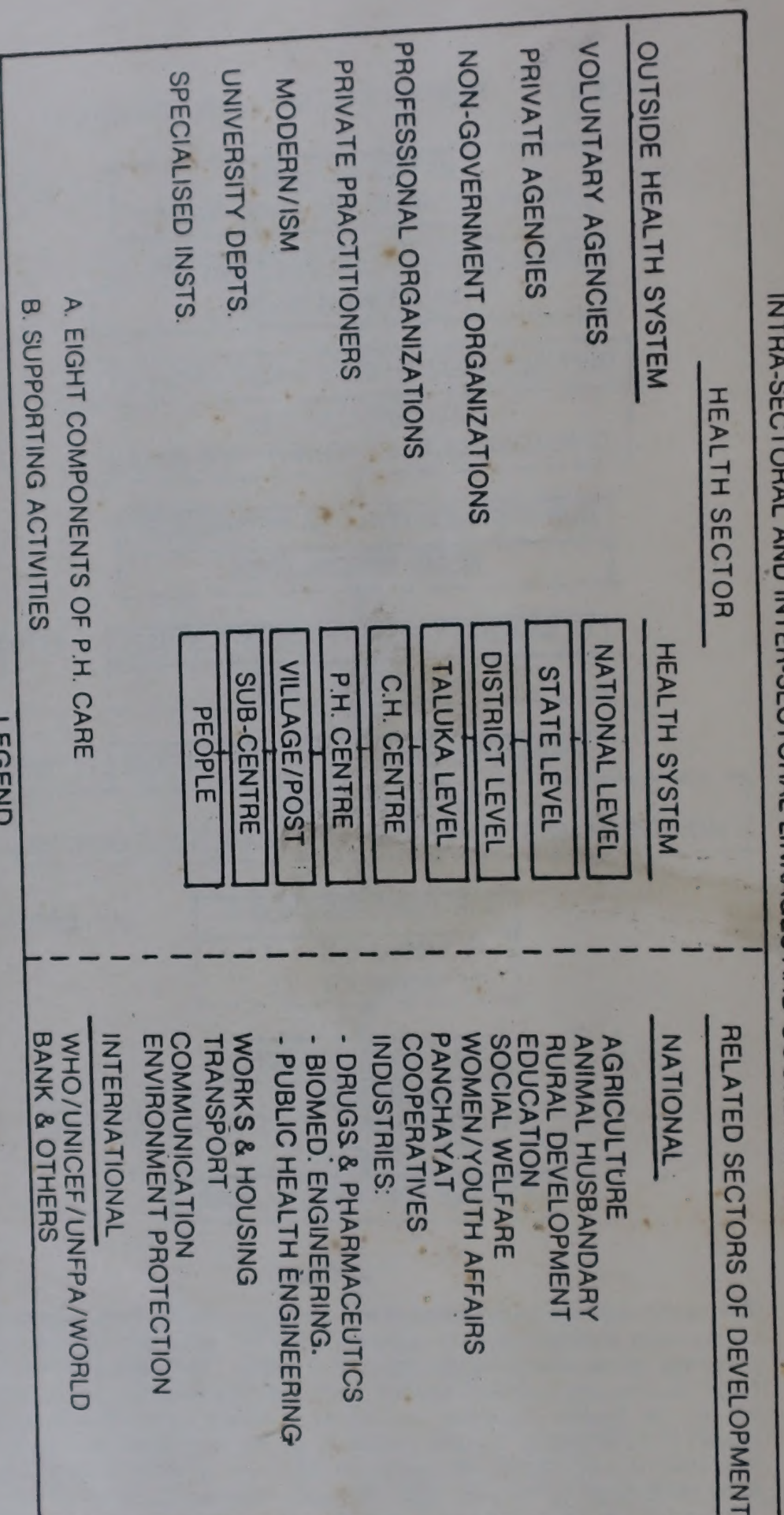
TABLE 1 HEALTH SYSTEM INFRASTRUCTURE



LEGEND

The health services organization in the country extending from the national level to a sub-centre level is diagrammatically represented in this table. Sub-centres constitute the most peripheral governmental health institutional facility. The village level health functionaries *i.e.* Health Guides and Trained Dais form the interface between the people and the governmental set up. The figures within the solid boxes represent the number of centres etc., whereas figures in parentheses outside the boxes on the right hand side represent the number of institutions in proportion to the population, which are currently available and which are aimed to be established by the year 1990. The type of the health and family welfare personnel that are available at different levels are given in the boxes marked by the dotted lines.

TABLE 2 HEALTH DEVELOPMENT NETWORK IN INDIA
INTRA-SECTORAL AND INTER-SECTORAL LINKAGES AND COORDINATION



LEGEND

A. EIGHT COMPONENTS OF P.H. CARE

B. SUPPORTING ACTIVITIES

Intra-Sectoral Linkages and Coordination - In the country we have at present a reasonably well developed health system infrastructure. However, within the health sector a number of non-governmental agencies are functioning and catering to the health needs of a large proportion of the population. Unfortunately, no systematic efforts have been made for establishing proper linkages and coordination with these non-governmental agencies. Even within the existing health system, there is a scope for more integrated and coordinated efforts.

Inter-Sectoral Linkages and Coordination - Health development is influenced directly as well as indirectly by the activities of other developmental sectors. Therefore, the primary health care has to become a part of overall socio-economic development process and its success depends upon establishing proper linkages with and coordinated efforts of all sectors.

